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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,230	01/12/2001	Fabrice Fougerolle	22750/468	1708

26646 7590 06/03/2003

KENYON & KENYON  
ONE BROADWAY  
NEW YORK, NY 10004

EXAMINER

PEAVEY, ENOCH E

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/760,230

Applicant(s)

FOUGEROLLE, FABRICE

Examiner

Enoch E Peavey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 10-14, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Holzer, US No. 4,427,205. Holzer discloses a sealing arrangement (FIG. 3), which includes a sealing ring having a sealing lip (4), which is curved forward in the direction of the area to be sealed off (FIG.3). The seal is pretensioned so as to surround and form a seal around the circumference of a machine element (3) to be sealed off. The sealing lip (4) has on the side facing radially away from the recess at least one recess (5) which only connects and allows flow between the area to be sealed off and the surrounding area if the sealing ring is incorrectly mounted and the sealing lip is erroneously curved forward in the direction of the surrounding area (i.e. if the seal was to be installed incorrectly the seal band A would be positioned on top and flow would be capable of escaping through the recesses labeled 5). The recess is embodied as a tube like channel (i.e. it has an elongated partially tubular shape over its longitudinal extent). There are at least two recesses uniformly distributed around the circumference. The sealing lip is made of a polymeric material (PTFE).

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3. Claims 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 198 36 986 A1 (DE 986). DE 986 discloses a sealing arrangement comprising a sealing ring (Figure 1) including at least one recess (11) on a side of the sealing lip facing radially away from the machine element (3). The at least one recess (11) includes a tube-like channel (i.e. it has a circular tubular construction). There are at least two recesses uniformly distributed around a circumference of the sealing lip (FIG. 1). The sealing lip is made of a polymeric material (PTFE). The sealing lip includes a recirculating spiral groove (4) on a side of the sealing lip radially facing toward the machine element (3).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holzer in view of DE 986. Holzer discloses substantially the same seal as applicant except for the side radially facing the machine element having a recirculating spiral groove for the medium that is to be sealed off. DE (986) discloses such an arrangement in order to return the fluid medium to the space to be sealed. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify

Holzer as taught by DE 986 in order to provide the seal of Holzer with an improved means of returning the fluid medium to the space to be sealed.

***Response to Arguments***

6. Applicant argues that Holzer does not disclose at least one recess, which only connects to allow flow between the area to be sealed off and the surrounding area if the sealing ring is incorrectly mounted. Examiner disagrees. The Holzer reference shows the sealing arrangement having a sealing contact width (A) when installed correctly. The recesses (swirl fins 5) are on the opposite side. Because of the convolutions created by the recesses on the opposite side, if this seal were installed with the recessed surface contacting the shaft it clearly would not be capable of creating a sealing contact width. Applicant is reminded that his claims are not directed towards a method of determining when a seal is incorrectly installed. Applicant claims is directed towards the structure of the seal. Once again, applicant has not distinguished the invention of the instant application from that of the Holzer reference.

7. With regard to the Guth reference, applicant argues that Guth does not show a seal with one recess. Examiner agrees, however applicant has not claimed a seal with one recess, applicant claim is directed towards a seal with "at least one recess". Guth clearly shows such a seal. Further applicant argues that Guth discloses axially spaced apart and u-shaped recesses. Examiner agrees, however applicant only claims the

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recesses being tube-like, the terminology tube-like is sufficiently broad enough to encompass axially spaced apart and u-shaped recesses.

8. Further with regard to both the Holzer and Guth reference because they are located on the non contacting surface of the seal will installed correctly, they inherently have no effect on the flow between the contacting surface and shaft unless installed incorrectly.

**9. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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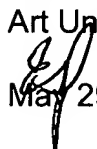
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Enoch E Peavey whose telephone number is 305 1977.

The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703) 308- 3179. The fax phone numbers for the organization where this application or proceeding is assigned are 305 3597 for regular communications and 305 3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1113.

Enoch E Peavey  
Art Unit 3676

  
May 29, 2003



**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**